

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for recording/managing audio level information, comprising:
  - partitioning an audio file into a header information area, an audio data area, and a tag information area;
  - recording an audio level information in the tag information area, the audio level information indicating an output level of audio data to be reproduced; and
  - recording an audio level flag information in the header information area, the audio level flag information indicating whether the audio level information has been recorded in the tag information area.
2. (Canceled)
3. (Previously Presented) The method of claim 1, wherein the audio file is any one of an MP3 audio file, MPEG2 audio file, AC3 audio file, WMV-format audio file, and Wave-format audio file.

4. (Previously Presented) The method of claim 1, wherein the audio level information is a peak level or an average level of the audio file.

5. (Canceled)

6. (Currently Amended) A method for adjusting an output level of audio data, comprising:

receiving an audio file;

checking audio level information recorded in the received audio file; and

adjusting an output level of audio data to be reproduced of the received audio file, on the basis of the checked audio level information, wherein the audio file is separated into a header information area, an audio data area, and a tag information area, and wherein the audio level information is stored in the tag information area and an audio level information flag is stored in the header information area, and wherein the adjusting comprises:

comparing the checked audio level information with a predetermined reference level;

adjusting a gain of the audio data to be reproduced in accordance with the comparison result and an audio volume level set by a user; and

amplifying and outputting the audio data to be reproduced, at the adjusted gain.

7. (Canceled)

8. (Previously Presented) The method of claim 6, wherein the checking comprises:  
checking the audio level information flag in the header information area of the received audio file, the audio level information flag indicating whether the audio level information has been recorded in the tag information area of the received audio file; and  
checking the audio level information recorded in the tag information area of the received audio file when the checked audio level information flag indicates that the audio level information was recorded.

9.-10. (Canceled)

11. (Currently Amended) The method of claim 10, wherein the adjusting a gain comprises increasing the gain of an audio amplifier when the checked audio level information is lower than the predetermined reference level, and reducing the gain when the checked audio level information is higher than the predetermined reference level.

12. (Currently Amended) The method of claim 40\_6, wherein the adjusting a gain comprises:

calculating a ratio between the predetermined reference level, a current audio file, and a next audio file; and

modifying the gain according to the ratio, wherein the predetermined reference level is an average audio level of audio files requested to be played.

13. (Previously Presented) The method of claim 6, further comprising searching a recording medium for the received audio file that was requested to be played, the recording medium storing a plurality of audio files, wherein the received audio file is any one of an MP3 audio file, MPEG2 audio file, AC3 audio file, WMV-format audio file and Wave-format audio file, wherein the recording medium is any one of a memory, optical disc, and hard disk included in any one of a portable terminal, portable computer, and personal computer having a digital audio playback function.

14. (Currently Amended) A machine-readable storage medium containing instructions for adjusting an output level of audio data, the instructions, when executed in a digital audio system, causing the system to:

search a recording medium for an audio file requested to be played, the recording medium storing a plurality of audio files;

check audio level information recorded in the searched audio file; and

adjust an output level of audio data to be reproduced of the searched audio file responsive to the checked audio level information, wherein the audio file is separated into a header information area, an audio data information area, and a tag information area, and wherein the audio level information is recorded in the tag information area and an audio level information flag is recorded in the header information, and wherein the instructions cause the system to:

compare the checked audio level information with a predetermined reference level;

adjust a gain of the audio data to be reproduced in accordance with the comparison result and an audio volume level set by a user; and

amplify and output the audio data to be reproduced, at the adjusted gain.

15. (Previously Presented) The medium of claim 14, wherein the searched audio file is any one of an MP3 audio file, MPEG2 audio file, AC3 audio file, WMV-format audio file, and Wave-format audio file, wherein the recording medium is any one of a memory, optical

disc, and hard disk included in any one of a portable terminal, portable computer, and personal computer having a digital audio playback function.

16. (Canceled)

17. (Previously Presented) The medium of claim 14, further containing instructions for causing the system to:

check for the audio level information flag in the header information area of the searched audio file, the audio level information flag indicating whether the audio level information has been recorded in the tag information area of the searched audio file; and

optionally check the audio level information recorded in the tag information of the searched audio file on the basis of the checked audio level information flag.

18.-19. (Canceled)

20. (Previously Presented) A digital audio system, comprising:

a recording device configured to store a plurality of audio files;

a converter configured to convert an audio file read from the recording device into audio data to be reproduced;

a controller configured to search the recording device for an audio file requested by a user to be played, check audio level information recorded in the searched audio file, and adjust an output level of audio data to be reproduced of the searched audio file according to the checked audio level information and a user set audio volume level; and

an amplifier configure to amplify the converted audio data according to the adjusted output level and output the amplified audio data, wherein the controller is configured to compare the checked audio level information with a predetermined reference level and adjust the gain of the audio amplifier in accordance with the comparison result and a system audio volume level to adjust the output level of the audio data to be reproduced, and wherein the predetermined reference level is an average audio level of audio files requested to be played.

21. (Previously Presented) The system of claim 20, wherein the digital audio system is any one of a portable terminal, a portable computer, and a personal computer having a playback function for the audio files, and wherein the searched audio file is any one of an MP3 audio file, MPEG2 audio file, AC3 audio file, WMV-format audio file and Wave-format audio file.

22. (Previously Presented) The system of claim 20, comprising:

an interfacing device configured to interface to a personal computer or contents provider server in order to download the audio files.

23. (Previously Presented) The system of claim 20, wherein the audio level information is recorded in a tag information of the searched audio file, and wherein the searched audio file includes a header information area, the header information area containing an audio level information flag indicative of whether the audio level information has been recorded in the tag information of the searched audio file.

24. (Previously Presented) The system of claim 23, wherein the controller is configured to first check the audio level information flag and selectively check the audio level information recorded in the tag information of the searched audio file on the basis of the checked audio level information flag.

25.-26. (Canceled)

27. (Previously Presented) An apparatus for adjusting an output level of audio data in a digital audio system, the digital audio system including a recording medium configured to store a plurality of audio files including at least two audio file types, and a converter configured



to convert an audio file read from the recording medium into audio data to be reproduced, the apparatus comprising:

a controller configured to search the recording medium for an audio file selected for playback, check audio level information recorded in the selected audio file, and adjust an output level of audio data to be reproduced of the selected audio file responsive to the checked audio level information; and

an audio amplifier configured to amplify the converted audio data and output the amplified audio data, wherein the controller is configured to compare the checked audio level information with a predetermined reference level and adjust the gain of the audio amplifier in accordance with the comparison result and a user set audio volume level, and wherein the predetermined reference level is an average audio level of audio files requested to be played, and wherein the audio level of the audio files is a peak level or an average level of the audio data to be reproduced for each audio file.

28. (Previously Presented) The apparatus of claim 27, comprising a speaker to broadcast the amplified audio data, wherein the selected audio file is any one of an MP3 audio file, MPEG2 audio file, AC3 audio file, WMV-format audio file and Wave-format audio file.

29. (Previously Presented) The apparatus of claim 27, wherein the audio level information is recorded in a tag information area of the searched audio file.

30. (Previously Presented) The apparatus of claim 29, wherein the searched audio file includes a header information area, the header information area containing an audio level information flag indicative of whether the audio level information has been recorded in the tag information area of the searched audio file, and wherein the controller is configured to first check the audio level information flag and check the audio level information recorded in the tag information area of the searched audio file when the audio level identification information tag indicates that the audio level information was recorded.

31.-32. (Canceled)